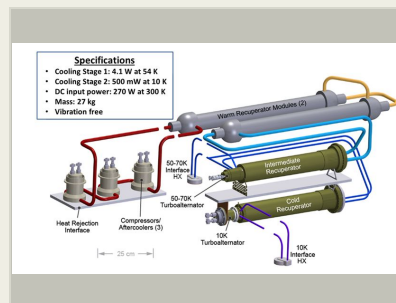
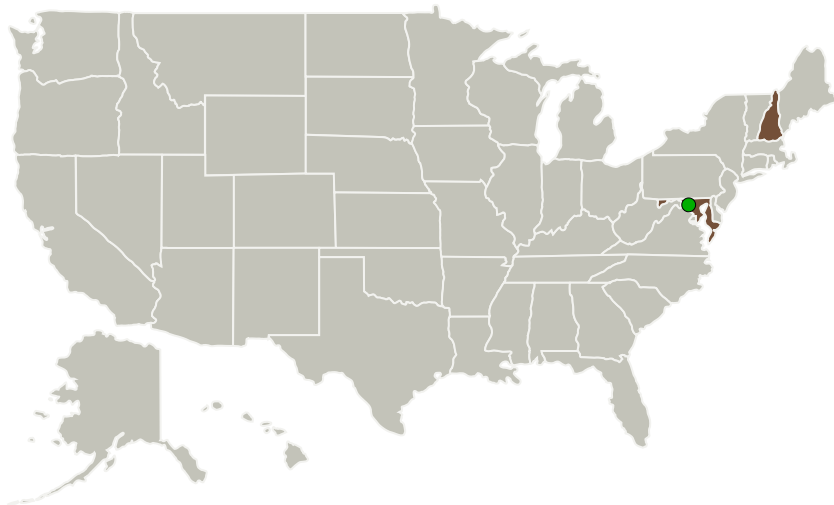


## Completed Technology Project (2017 - 2020)



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## A 10 K Multistage Cryocooler with Very Low Vibration, Phase II

Completed Technology Project (2017 - 2020)



Organizations Performing Work	Role	Type	Location
Creare LLC	Lead Organization	Industry	Hanover, New Hampshire
● Goddard Space Flight Center(GSFC)	Supporting Organization	NASA Center	Greenbelt, Maryland

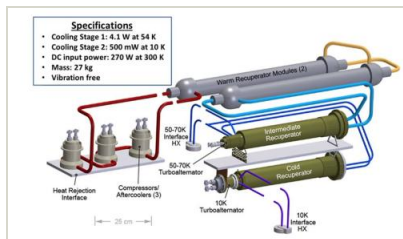
Primary U.S. Work Locations	
Maryland	New Hampshire

## Project Transitions

**May 2017:** Project Start**February 2020:** Closed out**Closeout Documentation:**

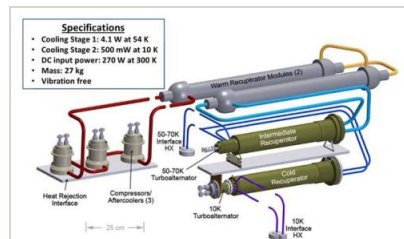
- Final Summary Chart(<https://techport.nasa.gov/file/141100>)

## Images

**Briefing Chart Image**

A 10 K Multistage Cryocooler with Very Low Vibration, Phase II

Briefing Chart Image

(<https://techport.nasa.gov/image/136644>)**Final Summary Chart Image**

A 10 K Multistage Cryocooler with Very Low Vibration, Phase II

(<https://techport.nasa.gov/image/127329>)

## Organizational Responsibility

**Responsible Mission Directorate:**

Space Technology Mission Directorate (STMD)

**Lead Organization:**

Creare LLC

**Responsible Program:**

Small Business Innovation Research/Small Business Tech Transfer

## Project Management

**Program Director:**

Jason L Kessler

**Program Manager:**

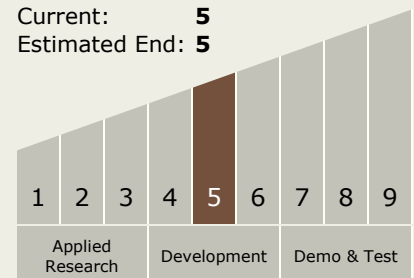
Carlos Torrez

**Principal Investigator:**

Mark Zagarola

## Technology Maturity (TRL)

Start: 5  
 Current: 5  
 Estimated End: 5



# A 10 K Multistage Cryocooler with Very Low Vibration, Phase II

Completed Technology Project (2017 - 2020)



## Technology Areas

### Primary:

- TX08 Sensors and Instruments
  - └ TX08.1 Remote Sensing Instruments/Sensors
    - └ TX08.1.6 Cryogenic / Thermal

## Target Destinations

The Sun, Earth, The Moon, Mars, Others Inside the Solar System, Outside the Solar System